

ABSTRACT

A charge pump DC/DC converter having an improved the ripple characteristic in its output voltage and make it possible to adjust the boosting rate in a stepwise manner. In phase I, two flying capacitors C_a , C_b are connected in series between voltage input terminal 12 and voltage output terminal 14. In this connection state, flying capacitor C_a is charged by the current supplied from DC power supply 10, while flying capacitor C_b discharges to the load side. In phase II, flying capacitor C_a is connected between voltage input terminal 12 and voltage output terminal 14, while flying capacitor C_b is connected between voltage input terminal 12 and the ground potential. In this connection state, flying capacitor C_a discharges to the load side, while flying capacitor C_b is charged by the current supplied from DC power supply 10.